AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of forming a carbon layer by vapor phase deposition, comprising the steps of:

adjusting a content of particles having a particle size of 0.5 μm or more in a film deposition system of the carbon layer to 1000 particles/ft^3/min or less; and then

starting a film deposition process of the carbon layer;

wherein said carbon layer is formed as a protective coating on a thermal head performing thermal recording;

wherein the carbon layer is formed directly on top of a lower protective layer such that the thermal head has a protective coating, and

wherein the carbon layer and the lower protective layer are successively formed on the thermal head under a continuous vacuum.

2. (original): The method according to claim 1, wherein said content of the particles having the particle size of 0.5 μm or more is reduced to 500 particles/ft^3/min.

3. (cancelled)

4. (original): The method according to claim 1, wherein a lower limit of said content of

the particles having the particle size of 0.5 μm or more ranges between 50 particles/ft^3/min and 100 particles/ft^3/min.

5. (currently amended): The method of forming a carbon layer by vapor phase deposition according to claim 1 ~~3~~, wherein said carbon layer is formed on top of an intermediate layer and the intermediate layer is formed on top of a lower protective layer such that the thermal head has a protective coating of a three-layer structure.

6. (previously presented): The method of forming a carbon layer by vapor phase deposition according to claim 5, wherein said carbon layer has a thickness from 0.5 μm to 5 μm, said intermediate layer has a thickness from 0.05 μm to 1 μm, and said lower protective layer has a thickness from 0.2 μm to 20 μm.

7. (canceled).

8. (cancelled)

9. (previously presented): The method according to claim 1, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 3000 particles/cfm.

10. (previously presented): The method according to claim 1, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 1000 particles/cfm.

11. (previously presented): The method according to claim 1, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 300 particles/cfm.

12. (previously presented): The method according to claim 9, wherein said step of adjusting the content of particles further includes pumping out the chamber after cleaning to remove floating particles within the chamber.

13. (new): A method of forming a carbon layer by vapor phase deposition, comprising the steps of:

adjusting a content of particles having a particle size of 0.5 μm or more in a film deposition system of the carbon layer to 1000 particles/ft^3/min or less; and then

starting a film deposition process of the carbon layer;

wherein said carbon layer is formed as a protective coating on a thermal head performing thermal recording,

wherein said carbon layer is formed on top of an intermediate layer and the intermediate layer is formed on top of a lower protective layer such that the thermal head has a protective coating of a three-layer structure, and

wherein the carbon layer, the intermediate layer, and the lower protective layer are successively formed on the thermal head under a continuous vacuum.

14. (new): The method according to claim 13, wherein said content of the particles having the particle size of 0.5 μm or more is reduced to 500 particles/ft^3/min.

15. (new): The method according to claim 13, wherein a lower limit of said content of the particles having the particle size of 0.5 μm or more ranges between 50 particles/ft^3/min and 100 particles/ft^3/min.

16. (new): The method according to claim 13, wherein said carbon layer has a thickness from 0.5 μm to 5μm, said intermediate layer has a thickness from 0.05 μm to 1 μm, and said lower protective layer has a thickness from 0.2 μm to 20 μm.

17. (new): The method according to claim 13, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 3000 particles/cfm.

18. (new): The method according to claim 13, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 1000 particles/cfm.

19. (new): The method according to claim 13, wherein said step of adjusting the content of particles includes cleaning an interior of a chamber of the film deposition system in which the film deposition process occurs using a dust cloth that produces no more than 300 particles/cfm.

20. (new): The method according to claim 17, wherein said step of adjusting the content of particles further includes pumping out the chamber after cleaning to remove floating particles within the chamber.